expanding the graph with a second plurality of one or more documents from the database, such that a third plurality includes a union of the first plurality of documents and the second plurality of documents, and the third plurality of documents is smaller than the plurality of received documents, the second plurality including one or more of: 1) all documents connected within a first specified number of links in a forward direction from one or more documents of the first plurality of documents, the forward direction being forward from the first plurality of documents, and 2) all documents connected within a second specified number of links in a backward direction from one or more documents of the first plurality of documents, the backward direction being backward from the first plurality of documents.

18.   The method of claim 10, wherein the first plurality of documents includes recently received documents of the plurality of received documents.

19.   The method of claim 10, wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

    shrinking the graph by removing one or more nodes of the graph.

20.   The method of claim 10, wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

    shrinking the graph by combining one or more sets of one or more nodes of the graph.
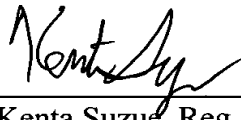
REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current supplemental preliminary amendment. The attached page is captioned "**Version With markings to show changes made**."

CONCLUSION

Applicants submit this Supplemental Preliminary Amendment prior to the examination of this application on the merits. Since the present amendment does not introduce new matter, Applicants respectfully request its entry prior to examination of the present application.

Respectfully submitted,

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<u>VERSION WITH MARKINGS TO SHOW CHANGES MADE</u>

<u>In the Claims:</u>

Please amend claims 1-20 as follows:

[1000.] <u>1.</u>   A method of focused crawling, comprising:

accessing a query input, the query input including at least a first query part and a second query part;

crawling a plurality of documents, at least some of the plurality of documents including links to each other, the crawling at least partly guided by a crawl metric, the crawl metric at least partly determined by a mechanism and by the first query part; and

returning target documents, the target documents being relevant to the second query part, the target [documnts] <u>documents</u> found from the plurality of crawled documents, the target documents returned at least partly based on a search metric, the search metric at least partly determined by the mechanism and by the second query part.

[1100.] <u>2.</u>   The method of claim [1000] <u>1</u>, wherein relevance includes importance.

[18000.] <u>3.</u>   A method of focused crawling, comprising:

accessing a query input including at least a first query part and a second query part;

crawling a plurality of documents, at least some of the plurality of documents including links to each other, the crawling at least partly guided by a crawl metric, the crawl metric at least partly determined by a first mechanism and by the first query part; and

returning target documents, the target documents being relevant to the second query part, the target documents found from the plurality of crawled documents, the target documents returned at least partly based on a search metric, the search metric at least partly determined by a second mechanism and by the second query part.

[18100.] <u>4.</u>   The method of claim [18000] <u>3</u>, wherein relevance includes importance.

[2000.] <u>5.</u>   A method of focused crawling, comprising:

accessing a query input;

crawling a plurality of documents, the documents including links to each other, and the crawling at least partly guided by a crawl metric, the crawl metric at least partly determined by a first mechanism, the first mechanism including a first combination, the first combination including a first plurality of one or more procedures, the first plurality of one or more procedures including one or more of: 1) evaluating relevance of documents using logical expressions of keywords and phrases, 2) evaluating relevance of documents using a template including a plurality of one or more template portions, at least one of the template portions including a first plurality of one or more hierarchical levels, 3) evaluating relevance of documents using a link structure of the crawled documents, and 4) evaluating relevance based on freshness of documents; and

returning target documents, the target documents being relevant to the query input, the target documents found from the plurality of crawled documents, the target documents returned at least partly based on a search metric, the search metric at least partly determined by a second mechanism, the second mechanism including a second combination, the second combination being different from the first combination, the second combination including a second plurality of one or more procedures, the second plurality of procedures including one or more of: 1) evaluating relevance of documents using logical expressions of keywords and phrases, 2) evaluating relevance of documents using a template including a plurality of one or more template portions, at least one of the template portions including a second plurality of one or more hierarchical levels, 3) evaluating relevance of documents using a link structure of the crawled documents, and 4) evaluating relevance based on freshness of documents.

[2200.] 6.   The method of claim [2000] 5, wherein relevance includes importance.

[2300.] 7.   The method of claim [2000] 5, wherein at least one of the first mechanism and the second mechanism includes:

associating a weight to each of the evaluated relevances of the procedures; and

combining the evaluated relevances and the weights of the evaluated relevances.

[2400.] 8.   The method of claim [2000] 5, wherein one or more of: 1) the first plurality of one or more hierarchical levels and 2) the second plurality of one or more hierarchical levels, includes at least one or more heading levels and one or more content levels.

[2500.] 9.   The method of claim [2000] 5, wherein evaluating relevance includes evaluating relevance of at least a first document and one or more of a first plurality of one or more referring documents and a second plurality of one or more referring documents, each of the first plurality of one or more referring documents referring to the first document directly, and each of the second plurality of referring documents referring to the first document indirectly through one or more documents.

[41000.] 10.   A method of focused crawling, comprising:

accessing a query input;

crawling a plurality of documents, the documents including links to each other, and the crawling at least partly guided by a crawl metric, the crawl metric at least partly determined by a first mechanism, the first mechanism including a first combination, the first combination including a first plurality of one or more procedures, the first plurality of one or more procedures including one or more of: 1) evaluating relevance of documents using logical expressions of keywords and phrases, 2) evaluating relevance of documents using a template including a plurality of one or more template portions, at least one of the template portions including a first plurality of one or more hierarchical levels, 3) evaluating relevance of documents using a link structure of the crawled documents, and 4) evaluating relevance based on freshness of documents; and

returning target documents, the target documents being relevant to the query input, the target documents found from the plurality of crawled documents, the target documents returned at least partly based on a search metric, the search metric at least partly determined by a second mechanism, the second mechanism including a second combination, the second combination being different from the first combination, the second combination including a second plurality of one or more procedures, the second plurality of procedures including one or more of: 1) evaluating relevance of documents using logical expressions of keywords and phrases, 2) evaluating relevance of documents using a template including a plurality of one or more template portions, at least one of the template portions including a second plurality of one or more hierarchical levels, 3) evaluating relevance of documents using a link structure of the crawled documents, and 4) evaluating relevance based on freshness of documents,

wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, includes:

accessing a first plurality of documents from a database of a plurality of received documents, the plurality of received documents including crawled documents, the first plurality of documents to be ranked;

generating a graph of the first plurality of documents;

assigning weights to one or more nodes of the graph;

finding an assignment of weights to one or more nodes of the graph, by propagating weights through the graph, the assignment of weight to a node based at least in part on calculating a weighted sum of weights propagated from neighboring nodes; and

generating a ranked list of at least the first plurality of documents, the ranked list at least partly generated from the graph.

[41200.] 11. The method of claim [41000] 10, wherein relevance includes importance.

[41300.] 12. The method of claim [41000] 10, wherein at least one of the first mechanism and the second mechanism includes:

associating a weight to each of the evaluated relevances of the procedures; and

combining the evaluated relevances and the weights of the evaluated relevances.

[41400.] 13. The method of claim [41000] 10, wherein one or more of: 1) the first plurality of one or more hierarchical levels and 2) the second plurality of one or more hierarchical levels, includes at least one or more heading levels and one or more content levels.

[41500.] 14. The method of claim [41000] 10, wherein evaluating relevance includes evaluating relevance of at least a first document and one or more of a first plurality of one or more referring documents and a second plurality of one or more referring documents, each of the first plurality of one or more referring documents referring to the first document directly, and each of the second plurality of referring documents referring to the first document indirectly through one or more documents.

[41600.] 15. The method of claim [41000] 10, wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

expanding the graph with a second plurality of one or more documents from the database, wherein a third plurality includes a union of the first plurality of documents and the second

plurality of documents, and the third plurality of documents is smaller than the plurality of received documents.

[41700.] 16. The method of claim [41000] 10, wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

expanding the graph with a second plurality of one or more documents from the database, such that a third plurality includes a union of the first plurality of documents and the second plurality of documents, and the third plurality of documents is smaller than the plurality of received documents, the second plurality including one or more of: 1) one or more documents connected within a first specified number of links in a forward direction from one or more documents of the first plurality of documents, the forward direction being forward from the first plurality of documents, and 2) one or more documents connected within a second specified number of links in a backward direction from one or more documents of the first plurality of documents, the backward direction being backward from the first plurality of documents.

[41800.] 17. The method of claim [41000] 10, wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

expanding the graph with a second plurality of one or more documents from the database, such that a third plurality includes a union of the first plurality of documents and the second plurality of documents, and the third plurality of documents is smaller than the plurality of received documents, the second plurality including one or more of: 1) all documents connected within a first specified number of links in a forward direction from one or more documents of the first plurality of documents, the forward direction being forward from the first plurality of documents, and 2) all documents connected within a second specified number of links in a backward direction from one or more documents of the first plurality of documents, the backward direction being backward from the first plurality of documents.

[41900.] 18. The method of claim [41000] 10, wherein the first plurality of documents includes recently received documents of the plurality of received documents.

[41a00.] <u>19.</u>   The method of claim [41000] <u>10,</u> wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

       shrinking the graph by removing one or more nodes of the graph.

[41b00.] <u>20.</u>   The method of claim [41000] <u>10,</u> wherein the procedure, of the first plurality of one or more procedures, of evaluating relevance of documents using a link structure of the crawled documents, further comprises:

       shrinking the graph by combining one or more sets of one or more nodes of the graph.